REMARKS

Claims 1, 3, 4, 7 and 13 are pending in the present application. Claim 1 has been amended and claims 2, 5, 6, and 8-12 have been cancelled without prejudice to or disclaimer of the subject matter contained therein. Claim 13 is added and is fully supported by at least claim 1 as originally filed. None of the amendments add new matter.

Reexamination of the application and reconsideration of the rejections and objections are respectfully requested in view of the above amendments and the following remarks, which follow the order set forth in the Office Action.

Before addressing the prior art rejections, we address objections to the specification and non-prior art objections and rejections of the claims. As requested by the Examiner, a clean copy of the abstract is attached. The objection to claim 12 is obviated by the cancellation of claim 12. The rejection of claims 5 and 6 under 35 U.S.C. § 101 is also moot in view of cancellation of claims 5 and 6. The rejection of claim of claims 1-7 and 12 under 35 U.S.C. § 112, second paragraph should also be withdrawn because claims 1 and 3 have been amended. Accordingly, the foregoing issues have been addressed and the objections and rejections should be withdrawn.

Turning to the prior art rejections, a brief review of the specification is provided for the convenience of the Examiner. The specification describes metal powders of titanium having a nickel coating which may be used for the production of porous Ni--Ti alloys. Ni--Ti alloys with large pore volumes and a three-dimensional interconnected network of pores and channel are particularly suitable for implants to achieve secure tissue-to-implant bonding. By using coated powders, local fluctuations in composition are limited and well under control. The use of Ni-coated Ti powder instead of mixtures of Ni and Ti powders also decreases the diffusion distance between the Ni and Ti atoms, which may eliminate or reduce the formation of unwanted intermetallic compounds. The use of Ni coated Ti powders characterised by a Ni:Ti atomic ratio of between 0.9 and 1.1 avoids the formation of secondary phases and yields an alloy with better mechanical properties.

Claims 1-2 and 4 stand rejected under 35 U.S.C. 102(b) over U.S. Patent No. 3,428,543 ("Weber et al."). Weber et al. does not anticipate the currently pending claims. Example 3 of Weber et al. cited in the Official Action discloses powders with a Ti core and Ni content of 60%. This corresponds to an atomic ratio Ni:Ti of 55:45 or 1.22. This is outside the range of 0.9 to 1.1 as reflected in claim 1. The subject matter of claims 1-2 and 4

would also not have been obvious over Weber et al. For example, Weber et al. offers no guidance as to the avoidance of the formation of secondary phases by selecting a composition within the claimed range. Accordingly, the rejection of claims 1-2 and 4 over Weber should be withdrawn.

Claims 1-7 and 12 were rejected as anticipated or obvious over JP 59-031840 ("Kurahashi et al."). The rejection is traversed for all of the following reasons. A complete translation of Kurahashi et al. is submitted herewith.

Kurahashi et al. is not directed to Ni coated Ti powders. Instead, Kurahashi et al. discloses preparing Ni-Ti compound by mixing Ni and Ti powder or plating Ni on the surface of the Ti powder. A simple mixture of Ni and Ti powders does not yield an Ni coated Ti powder as currently claimed. With respect to Ni plating, Kurahashi states "[t]he thickness of this nickel plating should be determined so that the amount of nickel is between 0.1wt% and 30wt%..." This corresponds to an atomic ratio of 26:74 or 0.35. The Official Action refers to Figure 1 of Kurahasi et al. as showing Ni at 0-50%. However, Figure 1 demonstrates experimental results obtained from a mixture of Ni and Ti powders for alloys prepared in accordance with Example 5 rather than Ni coated Ti powder. Kurahasi et al. would not have suggested the subject matter of claims 1, 3, 4, 7 and 13 because there is no suggestion of using Ni coated Ti particles in an atomic ratio as claimed which avoids the formation of secondary phases and yields an alloy with better mechanical properties. Accordingly, the rejection should be withdrawn.

Claims 1-4, 7 and 12 were rejected as anticipated or obvious over JP 50-8979 ("Tanaka et al."). A complete translation of Tanaka et al. is submitted herewith. The rejection is traversed for the following reasons.

Tanaka et al. is directed to complex powders for thermal spraying. Tanaka et al. states that since nickel-based allows are difficult to cold process, it is preferable to coat them onto the surface of a more workable metal. See p. 2, lines 19-21. Tanaka et al. further discloses the use of powder with a titanium alloy core or titanium hydride core in contrast to the titanium core as set forth in the claims. Tanaka et al. states that in the case of a pure titanium core [as opposed to a titanium alloy core], titanium hydride powder should be used. See p. 3, lines 19 and 20. Accordingly, claims 1, 3, 4, 7 and 13 are not anticipated by Tanaka et al.

Claims 1, 3, 4, 7 and 13 would also not have been obvious over Tanaka et al. Tanaka et al. does not suggest the use of a powder with a titanium core. Rather, Tanaka et al. teaches

the use of titanium hydride and that the hydrogen is removed by the heating during thermal spraying or melting to form the resultant film. It is noted that the currently pending claims are directed to powders or sintered bodies, not films. Accordingly, the pending claims are non-obvious in view of Tanaka et al. In view of the above, the rejections over Tanaka et al should be withdrawn.

Claims 1-4, 7 and 12 were also rejected as anticipated or obvious over RU 2039125 (Afonichev et al.). A complete translation of Afonichev et al. is also submitted herewith. Afonichev et al. is directed to Ti-Ni-Al alloys as a coating material. Afonichev et al. does not disclose or suggest the claimed subject matter because there is no disclosure or suggestion of a coated powder, consisting of a metallic Ti core and a metallic Ni coating. Rather Afonichev et al. includes 5-10% Al. There is no suggestion of a coated powder in an atomic ratio as claimed which avoids the formation of secondary phases and yields an alloy with better mechanical properties. Therefore, the rejections over Afonichev et al. should be withdrawn.

Claims 1-7 and 12 were rejected as obvious over U.S. Patent No. 2,853,403 (Mackiw et al.). Mackiw et al. would not have suggested the subject matter of claims 1, 3, 4, 7 and 13 because there is no suggestion of using Ni coated Ti particles in an atomic ratio as claimed which avoids the formation of secondary phases and yields an alloy with better mechanical properties. Indeed, Mackiw et al. teaches the use of nucleation agents such as Fe, Co., Mo and TiC. Accordingly, the rejection should be withdrawn.

For the foregoing reasons, claims 1, 3, 4, 7 and 13 are considered allowable. A Notice to this effect is respectfully requested. If any questions remain, the Examiner is invited to contact the undersigned at the number given below.

Respectfully submitted,

HUTCHISON LAW GROUP PLLC

Date: 2/18/08

By: Allen R. Baum

Allen R. Baum
Registration No. 36,086

P.O. Box 31686
Raleigh, NC 27612
+1.919.829.9600